

 **PORTAL**
US Patent & Trademark Office

Subscribe (Full Service) Register (Limited Service, Free) Login
 Search: The ACM Digital Library The Guide

THE ACM DIGITAL LIBRARY

 [Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used synchronous asynchronous

Found 9,513 of 151,219

Sort results by

relevance 

 Save results to a Binder[Try an Advanced Search](#)

Display results

expanded form 

 [Search Tips](#)[Try this search in The ACM Guide](#) Open results in a new window

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale 

- 1 [A multi-layer client-server queueing network model with synchronous and asynchronous messages](#)

S. Ramesh, H. G. Perros

October 1998 **Proceedings of the first international workshop on Software and performance**Full text available:  [pdf\(1.52 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

- 2 [Power and performance evaluation of globally asynchronous locally synchronous processors](#)

Anoop Iyer, Diana Marculescu

May 2002 **ACM SIGARCH Computer Architecture News**, Volume 30 Issue 2Full text available:   Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)
[Publisher Site](#)

Due to shrinking technologies and increasing design sizes, it is becoming more difficult and expensive to distribute a global clock signal with low skew throughout a processor die. Asynchronous processor designs do not suffer from this problem since they do not have a global clock. However, a paradigm shift from synchronous to asynchronous is unlikely to happen in the processor industry in the near future. Hence the study of Globally Asynchronous Locally Synchronous (or GALS) systems is relevant ...

- 3 [Automatic generation of synchronous test patterns for asynchronous circuits](#)

Oriol Roig, Jordi Cortadella, Marco A. Peña, Enric Pastor

June 1997 **Proceedings of the 34th annual conference on Design automation - Volume 00**Full text available:   Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)
[Publisher Site](#)

This paper presents a novel approach for automatic test pattern generation of asynchronous circuits. The techniques used for this purpose assume that the circuit can only be exercised by applying synchronous test vectors, as is done by real-life testers. The main contribution of the paper is the abstraction of the circuit's behavior as a synchronous finite state machine in such a way that similar techniques to those currently used for synchronous circuits can be safely applied for testing. Currently, th ...



- 4 [Unifying synchronous and asynchronous message-passing models](#) 
Maurice Herlihy, Sergio Rajsbaum, Mark R. Tuttle
June 1998 **Proceedings of the seventeenth annual ACM symposium on Principles of distributed computing**
Full text available:  pdf(1.22 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

- 5 [Integration of synchronous and asynchronous traffic on the MetaRing and its performance study](#) 
Yoram Ofek, Khosrow Sohraby, Ho-Ting Wu
February 1997 **IEEE/ACM Transactions on Networking (TON)**, Volume 5 Issue 1
Full text available:  pdf(311.82 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

- 6 [Technical Session: Constructing a web-based asynchronous and synchronous collaboration environment using WebDAV and Lotus Sametime](#) 
Changtao Qu, Wolfgang Nejdl
October 2001 **Proceedings of the 29th annual ACM SIGUCCS conference on User services**
Full text available:  pdf(477.98 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper we present our practice of constructing a Web-based asynchronous and synchronous collaboration environment for supporting collaborative distance learning between a German university and a university in Italy. We utilize the recent collaboration-friendly Internet protocol WebDAV to implement a groupware system which can support document-centric asynchronous collaboration activities, e.g., collaborative document authoring, collaborative document management, etc., as well as an indust ...

Keywords: asynchronous collaboration, lotus sametime, synchronous collaboration, web-based distributed authoring and versioning

- 7 [Toward integrated support of synchronous and asynchronous communication in cooperative work: an empirical study of real group communication](#) 
Yasuhisa Sakamoto, Eiji Kuwana
December 1993 **Proceedings of the conference on Organizational computing systems**
Full text available:  pdf(749.94 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: argument model, communication modes, cooperative effects, electronic mail

- 8 [Unifying synchronous/asynchronous state machine synthesis](#) 
Kenneth Y. Yun, David L. Dill
November 1993 **Proceedings of the 1993 IEEE/ACM international conference on Computer-aided design**
Full text available:  pdf(800.19 KB) Additional Information: [full citation](#), [references](#), [citations](#)

- 9 [Time and message bounds for election in synchronous and asynchronous complete networks](#) 

Yehuda Afek, Eli Gafni

August 1985 **Proceedings of the fourth annual ACM symposium on Principles of distributed computing**

Full text available:  pdf(1.04 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



10 Practical advances in asynchronous design and in asynchronous/synchronous interfaces

Erik Brunvand, Steven Nowick, Kenneth Yun

June 1999 **Proceedings of the 36th ACM/IEEE conference on Design automation**

Full text available:  pdf(155.17 KB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



11 (V)HDL-based verification of heterogeneous synchronous/asynchronous systems

Hans Eveking

September 1994 **Proceedings of the conference on European design automation**

Full text available:  pdf(468.26 KB)

Additional Information: [full citation](#), [references](#), [index terms](#)



12 Circuit considerations for low power: A mixed-clock issue queue design for globally asynchronous, locally synchronous processor cores

Venkata Syam P. Rapaka, Diana Marculescu

August 2003 **Proceedings of the 2003 international symposium on Low power electronics and design**

Full text available:  pdf(234.31 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Ever shrinking device sizes and innovative micro-architectural and circuit design techniques have made it possible to have multi-million transistor systems running at multi-gigahertz speeds. However, such a tremendous computational capability comes at a high price in terms of power consumption and design effort in distributing a global clock signal across the chip. One of the most promising strategies that addresses these issues is the Globally Asynchronous, Locally Synchronous (GALS) design sty ...

Keywords: GALS, issue window design, mixed-clock circuits



13 Designing synchronous algorithms for asynchronous processors

Ramesh Subramonian

June 1992 **Proceedings of the fourth annual ACM symposium on Parallel algorithms and architectures**

Full text available:  pdf(1.06 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



14 Efficiency of Synchronous Versus Asynchronous Distributed Systems

Eshrat Arjomandi, Michael J. Fischer, Nancy A. Lynch

July 1983 **Journal of the ACM (JACM)**, Volume 30 Issue 3

Full text available:  pdf(467.65 KB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

15 A difference in efficiency between synchronous and asynchronous systems

Eshrat Arjomandi, Michael J. Fischer, Nancy A. Lynch
May 1981 **Proceedings of the thirteenth annual ACM symposium on Theory of computing**

Full text available:  pdf(400.73 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A system of parallel processes is said to be synchronous if all processes run using the same clock, and it is asynchronous if each process has its own independent clock. For any s, n, a particular distributed problem is defined involving system behavior at n "ports". This problem can be solved in time s by a synchronous system but requires time at least (s-1) log n on any asynchronous system.

16 Synchronous and asynchronous

Flaviu Cristian
April 1996 **Communications of the ACM**, Volume 39 Issue 4

Full text available:  pdf(1.56 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#), [review](#)

17 Integration of synchronous and asynchronous collaboration activities

Larry S. Jackson, Ed Grossman
June 1999 ACM Computing Surveys (CSUR)

Full text available:  pdf(76.94 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The integrated synchronous and asynchronous collaboration (ISAAC) project [1] is constructing a communication and collaboration system to bridge traditional workgroup barriers of time and space. Possible applications include military command and control, corporate real-time collaboration, and distributed teams of research scientists. Thus, this system must host the widest possible range of applications, and must run on heterogeneous hardware. ISAAC incorporates real-time (synchrono ...

18 The tangram framework (embedded tutorial): asynchronous circuits for low power

Joep Kessels, Ad Peeters
January 2001 **Proceedings of the 2001 conference on Asia South Pacific design automation**

Full text available:  pdf(255.11 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Asynchronous CMOS circuits have the potential for very low power consumption, because they only dissipate when and where active. In addition they have favorable EMC properties, since they emit less energy, which in addition is evenly distributed over the spectrum. The Tangram framework supports the design of asynchronous circuits in a high-level programming language. Using this framework we have designed several chips, such as for instance for pagers and smart cards, which are clearly super ...

19 Convergence rate and termination of asynchronous iterative algorithms

Dimitri P. Bertsekas, John N. Tsitsiklis
June 1986 **Proceedings of the 3rd international conference on Supercomputing**

Full text available:  pdf(1.26 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We consider iterative algorithms of the form $x := f(x)$, executed by a parallel or distributed computing system. We focus on asynchronous implementations whereby each processor iterates on a different component of x , at its own pace, using the most recently received (but possibly outdated) information on the remaining components of x . We provide results on the convergence rate of such algorithms and make a comparison wi ...

Keywords: asynchronous algorithms, distributed algorithms, iterative methods, parallel algorithms, termination detection

20 Posters: Synchronous versus asynchronous collaboration in situated multi-agent systems



Danny Weijns, Tom Holvoet

July 2003 **Proceedings of the second international joint conference on Autonomous agents and multiagent systems**

Full text available: [pdf\(92.91 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

According to the taxonomy for agent activity, proposed by V. Parunak, a collaboration is an interaction between agents of a multi-agent system (MAS) whereby the agents explicitly coordinate their actions before they cooperate. We discuss two sub-types of collaboration in the context of situated MASs, namely asynchronous and synchronous collaboration. After setting up collaboration, the interaction between the agents in an asynchronous collaboration happens indirectly through the environment. Age ...

Keywords: collaboration, interaction, synchronization

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads: [Adobe Acrobat](#)

[QuickTime](#)

[Windows Media Player](#)

[Real Player](#)

PORTAL

US Patent & Trademark Office

Subscribe (Full Service) Register (Limited Service, Free) Login

Search: The ACM Digital Library The Guide

synchronous asynchronous database

THE ACM DIGITAL LIBRARY

Feedback Report a problem Satisfaction survey

Terms used synchronous asynchronous database Found 9,546 of 151,219

Sort results by relevance Save results to a Binder Try an Advanced Search
Display results expanded form Search Tips Try this search in The ACM Guide
 Open results in a new window

Results 1 - 20 of 200 Result page: 1 2 3 4 5 6 7 8 9 10 next
Best 200 shown Relevance scale

1 Global change master directory: object-oriented active asynchronous transaction management in a federated environment using data agents

Zina Ben Miled, Srinivasan Sikkupparbathyam, Omran Bukhres, Kishan Nagendra, Eric Lynch, Marcelo Areal, Lola Olsen, Chris Gokey, David Kendig, Tom Northcutt, Rosy Cordova, Gene Major, Nanine Savage

March 2001 **Proceedings of the 2001 ACM symposium on Applied computing**

Full text available: pdf(185.55 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: JDBC, Java, RMI, World Wide Web, XML, asynchronous, component, distributed, distributed object management, global transaction management, interface, interoperability, object-oriented

2 Designing and implementing asynchronous collaborative applications with Bayou

W. Keith Edwards, Elizabeth D. Mynatt, Karin Petersen, Mike J. Spreitzer, Douglas B. Terry, Marvin M. Theimer

October 1997 **Proceedings of the 10th annual ACM symposium on User interface software and technology**

Full text available: pdf(1.58 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: Bayou, asynchronous interaction, computer-supported cooperative work, distributed systems

3 Modular verification of asynchronous networks

Bengt Jonsson

December 1987 **Proceedings of the sixth annual ACM Symposium on Principles of distributed computing**

Full text available: pdf(1.72 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

4 Technical Session: Constructing a web-based asynchronous and synchronous collaboration environment using WebDAV and Lotus Sametime

Changtao Qu, Wolfgang Nejdl

October 2001 **Proceedings of the 29th annual ACM SIGUCCS conference on User services**

Full text available:  pdf(477.98 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper we present our practice of constructing a Web-based asynchronous and synchronous collaboration environment for supporting collaborative distance learning between a German university and a university in Italy. We utilize the recent collaboration-friendly Internet protocol WebDAV to implement a groupware system which can support document-centric asynchronous collaboration activities, e.g., collaborative document authoring, collaborative document management, etc., as well as an indust ...

Keywords: asynchronous collaboration, lotus sametime, synchronous collaboration, web-based distributed authoring and versioning

5 The need for distributed asynchronous transactions

Lyman Do, Prabhu Ram, Pamela Drew

June 1999 **ACM SIGMOD Record , Proceedings of the 1999 ACM SIGMOD international conference on Management of data**, Volume 28 Issue 2

Full text available:  pdf(262.30 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The theme of the paper is to promote research on asynchronous transactions. We discuss our experience of executing synchronous transactions on a large distributed production system in The Boeing Company. Due to the poor performance of synchronous transactions in our environment, it motivated the exploration of asynchronous transactions as an alternate solution. This paper presents the requirements and benefits/limitations of asynchronous transactions. Open issues related to large scale depl ...

6 Simulating DB2 buffer pool management

Wenguang Wang, Richard B. Bunt

November 2000 **Proceedings of the 2000 conference of the Centre for Advanced Studies on Collaborative research**

Full text available:  pdf(217.19 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Storage management is an important part of any DBMS. The buffer pool in DB2 is used to cache the disk pages of the database, and its management algorithm can significantly affect performance. In order to investigate performance issues relating to the buffer pool management algorithm, a trace of buffer pool requests was collected and a trace-driven simulator was developed so that the impact of various parameters of the buffer pool management algorithm could be investigated under controlled circum ...

7 What have we learnt from using real parallel machines to solve real problems?

G. C. Fox

January 1989 **Proceedings of the third conference on Hypercube concurrent computers and applications - Volume 2**

Full text available:  pdf(4.08 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We briefly review some key scientific and parallel processing issues in a selection of some 84 existing applications of parallel machines. We include the MIMD hypercube transputer array, BBN Butterfly, and the SIMD ICL DAP, Goodyear MPP and Connection Machine from Thinking Machines. We use a space-time analogy to classify problems and show how a division into synchronous, loosely synchronous and asynchronous problems is helpful. This classifies problems into those suitable for SIMD or MIMD ...

8 An asynchronous rule-based approach for business process automation using obligations

Alan Abrahams, David Eyers, Jean Bacon

October 2002 **Proceedings of the 2002 ACM SIGPLAN workshop on Rule-based programming**

Full text available:  pdf(498.93 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The Edee architecture provides a mechanism for explicitly and uniformly capturing business occurrences, and provisions of contracts, policies, and law. Edee is able to reason about the interactions of intra-, inter-, and extra-organizational policy, and execute business procedures informed by the combined legal effects of these diverse rules. We show through an example how Edee's asynchronous approach, namely to initiate actions only after consulting the database to do ...

Keywords: conflict detection, conflict resolution, contracts, policies

9 Talking to strangers: an evaluation of the factors affecting electronic collaboration

Steve Whittaker

November 1996 **Proceedings of the 1996 ACM conference on Computer supported cooperative work**

Full text available:  pdf(1.22 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: asynchronous communications, empirical studies, group memory, interpersonal communication, newsgroups, workplace interaction

10 Asynchronous Byzantine consensus

Chagit Attiya, Danny Dolev, Joseph Gil

August 1984 **Proceedings of the third annual ACM symposium on Principles of distributed computing**

Full text available:  pdf(1.09 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Reaching agreement in an asynchronous environment is essential to guarantee consistency in distributed data processing. All previous asynchronous protocols were either probabilistic or they assumed a fail-stop mode of failure. The deterministic protocol presented in this paper reaches a Strong Byzantine Agreement in a system of asynchronous processors; and therefore can sustain arbitrary faults. In our model, processors can be completely asynchronous, though the communication network has th ...

11 Distributed transactions in practice

Prabhu Ram, Lyman Do, Pamela Drew

September 1999 **ACM SIGMOD Record**, Volume 28 Issue 3

Full text available:  pdf(873.01 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

The concept of transactions and its application has found wide and often indiscriminate usage. In large enterprises, the model for distributed database applications has moved away from the client-server model to a multi-tier model with large database application software forming the middle tier. The software philosophy of "buy and not build" in large enterprises has had a major influence by extending functional requirements such as transactions and data consistency throughout th ...

12

The convergence of AOP and active databases: towards reactive middleware

Mariano Cilia, Michael Haupt, Mira Mezini, Alejandro Buchmann
September 2003 **Proceedings of the second international conference on Generative programming and component engineering**

Full text available:  pdf(330.81 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Reactive behavior is rapidly becoming a key feature of modern software systems in such diverse areas as ubiquitous computing, autonomic systems, and event-based supply chain management. In this paper we analyze the convergence of techniques from aspect oriented programming, active databases and asynchronous notification systems to form reactive middleware. We identify the common core of abstractions and explain both commonalities and differences to start a dialogue across community boundaries. W ...

13 CARAT: a testbed for the performance evaluation of distributed database systems 

Walt Kohler, Bao-Chyuan Jenq

November 1999 **Proceedings of 1986 ACM Fall joint computer conference**

Full text available:  pdf(1.21 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

14 An architectural style of product lines for distributed processing systems, and practical selection method 

Yoshitomi Morisawa, Koji Torii

September 2001 **ACM SIGSOFT Software Engineering Notes , Proceedings of the 8th European software engineering conference held jointly with 9th ACM SIGSOFT international symposium on Foundations of software engineering**, Volume 26 Issue 5

Full text available:  pdf(284.13 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

When implementing an application system in a distributed computing environment, several architectural questions arise, such as how and where computing resources are arranged, and how the communication among computing resources are implemented. To simplify the process of making these choices, we have developed an architectural style for distributed processing system. The style classifies product lines for distributed processing systems into nine categories based on the location of data storage an ...

Keywords: architectural style, distributed computing model, distributed processing system, product lines, software architecture

15 Disconnection modes for mobile databases 

Joanne Holliday, Divyakant Agrawal, Amr El Abbadi

July 2002 **Wireless Networks**, Volume 8 Issue 4

Full text available:  pdf(198.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

As mobility permeates into todays computing and communication arena, we envision application infrastructures that will increasingly rely on mobile technologies. Traditional database applications and information service applications will need to integrate mobile entities: people and computers. In this paper, we develop a distributed database framework for mobile environments. A key requirement in such an environment is to support frequent connection and disconnection of database sites. We present ...

Keywords: data consistency, databases, disconnected operation, mobility, replication

16

Conditions on input vectors for consensus solvability in asynchronous distributed 

systems

Achour Mostefaoui, Sergio Rajsbaum, Michel Raynal

July 2001 **Proceedings of the thirty-third annual ACM symposium on Theory of computing**

Full text available:  pdf(288.66 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

This paper introduces and explores a new condition based approach to solve the consensus problem in asynchronous systems. The approach consists of identifying sets of input vectors, called conditions, for which it is possible to design a protocol solving consensus despite the occurrence of up to f process crashes. The first main result is a generic consensus protocol for the shared memory model. It always guarantees agreement, and ...

Keywords: asynchronous systems, consensus, fault-tolerance

17 Replica control in distributed systems: as asynchronous approach 

Calton Pu, Avraham Leff

April 1991 **ACM SIGMOD Record , Proceedings of the 1991 ACM SIGMOD international conference on Management of data**, Volume 20 Issue 2

Full text available:  pdf(1.15 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

18 A comparison of channel scanning schemes for distributed formation and reconfiguration 

A. O. Mahajan, A. J. Dadej, K. V. Lever

July 1998 **Wireless Networks**, Volume 4 Issue 4

Full text available:  pdf(328.09 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

A packet radio network (for example, wireless LAN, mobile tactical network) consists of a number of nodes, each equipped with a transceiver, exchanging data packets via radio channels. In this paper we identify and discuss issues related to the process of forming a network in an automatic and distributed manner. During network initialisation and reconfiguration, the time to complete the network formation process is an important performance parameter. We define two measures which can be used ...

19 A distance education/computer mediated communication integrated framework 

Irene Wong-Bushby

April 2000 **Journal of Computing Sciences in Colleges , Proceedings of the fifth annual CCSC northeastern conference on The journal of computing in small colleges**, Volume 15 Issue 5

Full text available:  pdf(237.71 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

20 A survey of asynchronous remote procedure calls 

A. L. Ananda, B. H. Tay, E. K. Koh

April 1992 **ACM SIGOPS Operating Systems Review**, Volume 26 Issue 2

Full text available:  pdf(910.89 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

Remote Procedure Call (RPC) is a popular paradigm for interprocess communication in distributed systems. It is simple, flexible and powerful. However, most of the RPC systems today are synchronous in nature, and hence fail to exploit fully the parallelism inherent in distributed applications. In view of this, various asynchronous RPC systems have been designed and implemented to achieve higher parallelism while retaining the familiarity and simplicity of synchronous RPC. Asynchronous RPC calls d ...

Keywords: asynchronous RPC, distributed systems, high-throughput, interprocess communication (IPC), intra-machine call, low-latency, parallelism, remote procedure call (RPC), synchronous RPC, transport-independent

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

 **PORTAL**
US Patent & Trademark Office

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide



THE ACM DIGITAL LIBRARY

 [Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used **synchronous asynchronous database server**

Found 24,556 of 151,219

Sort results by


 Save results to a Binder[Try an Advanced Search](#)

Display results


 Search Tips[Try this search in The ACM Guide](#) Open results in a new window

Results 1 - 20 of 200

Result page: **1** [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale **1 Designing and implementing asynchronous collaborative applications with Bayou**

W. Keith Edwards, Elizabeth D. Mynatt, Karin Petersen, Mike J. Spreitzer, Douglas B. Terry, Marvin M. Theimer

October 1997 **Proceedings of the 10th annual ACM symposium on User interface software and technology**Full text available:  [pdf\(1.58 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: Bayou, asynchronous interaction, computer-supported cooperative work, distributed systems

2 An architectural style of product lines for distributed processing systems, and practical selection method

Yoshitomi Morisawa, Koji Torii

September 2001 **ACM SIGSOFT Software Engineering Notes , Proceedings of the 8th European software engineering conference held jointly with 9th ACM SIGSOFT international symposium on Foundations of software engineering**, Volume 26 Issue 5Full text available:  [pdf\(284.13 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

When implementing an application system in a distributed computing environment, several architectural questions arise, such as how and where computing resources are arranged, and how the communication among computing resources are implemented. To simplify the process of making these choices, we have developed an architectural style for distributed processing system. The style classifies product lines for distributed processing systems into nine categories based on the location of data storage an ...

Keywords: architectural style, distributed computing model, distributed processing system, product lines, software architecture

3 A flexible and recoverable client/server database event notification system

Eric N. Hanson, I.-Cheng Chen, Roxana Dastur, Kurt Engel, Vijay Ramaswamy, Wendy Tan, Chun Xu

February 1998 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 7 Issue 1

Full text available:  pdf(105.38 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

A software architecture is presented that allows client application programs to interact with a DBMS server in a flexible and powerful way, using either direct, volatile messages, or messages sent via recoverable queues. Normal requests from clients to the server and replies from the server to clients can be transmitted using direct or recoverable messages. In addition, an application event notification mechanism is provided, whereby client applications running anywhere on the network can register ...

4 **Technical Session: Constructing a web-based asynchronous and synchronous collaboration environment using WebDAV and Lotus Sametime**



Changtao Qu, Wolfgang Nejdl

October 2001 **Proceedings of the 29th annual ACM SIGUCCS conference on User services**

Full text available:  pdf(477.98 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper we present our practice of constructing a Web-based asynchronous and synchronous collaboration environment for supporting collaborative distance learning between a German university and a university in Italy. We utilize the recent collaboration-friendly Internet protocol WebDAV to implement a groupware system which can support document-centric asynchronous collaboration activities, e.g., collaborative document authoring, collaborative document management, etc., as well as an indust ...

Keywords: asynchronous collaboration, lotus sametime, synchronous collaboration, web-based distributed authoring and versioning

5 **Designing an Efficient and Scalable Server-side Asynchrony Model for CORBA**



Darrell Brunsch, Carlos O'Ryan, Douglas C. Schmidt

August 2001 **ACM SIGPLAN Notices**, Volume 36 Issue 8

Full text available:  pdf(234.83 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

When the Asynchronous Method Invocation (AMI) model was introduced into the CORBA specification, client applications benefited from the ability to invoke non-blocking two-way requests. In particular, AMI improved the scalability of clients by removing the restrictions associated with Synchronous Method Invocations (SMI). Server request handling remained synchronous, however, which minimized the benefits of AMI for middle-tier servers, such as firewall gateways and front-end database servers. This ...

Keywords: CORBA, asynchronous method invocation, design patterns

6 **Integration of synchronous and asynchronous collaboration activities**



Larry S. Jackson, Ed Grossman

June 1999 **ACM Computing Surveys (CSUR)**

Full text available:  pdf(76.94 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The integrated synchronous and asynchronous collaboration (ISAAC) project [1] is constructing a communication and collaboration system to bridge traditional workgroup barriers of time and space. Possible applications include military command and control, corporate real-time collaboration, and distributed teams of research scientists. Thus, this system must host the widest possible range of applications, and must run on heterogeneous hardware. ISAAC incorporates real-time (synchronous ...

7 **Applying performance modelling to a telecommunication system**



Christiane Shousha, Dorina Petriu, Anant Jalnapurkar, Kennedy Ngo

October 1998 **Proceedings of the first international workshop on Software and performance**

Full text available:  pdf(672.25 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

8 Sleepers and workaholics: caching strategies in mobile environments 

Daniel Barbará, Tomasz Imieński

May 1994 **ACM SIGMOD Record , Proceedings of the 1994 ACM SIGMOD international conference on Management of data**, Volume 23 Issue 2

Full text available:  pdf(1.06 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In the mobile wireless computing environment of the future a large number of users equipped with low powered palm-top machines will query databases over the wireless communication channels. Palmtop based units will often be disconnected for prolonged periods of time due to the battery power saving measures; palmtops will also frequently relocate between different cells and connect to different data servers at different times. Caching of frequently accessed data items will be an important te ...

9 Transactional client-server cache consistency: alternatives and performance 

Michael J. Franklin, Michael J. Carey, Miron Livny

September 1997 **ACM Transactions on Database Systems (TODS)**, Volume 22 Issue 3

Full text available:  pdf(452.41 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Client-server database systems based on a data shipping model can exploit client memory resources by caching copies of data items across transaction boundaries. Caching reduces the need to obtain data from servers or other sites on the network. In order to ensure that such caching does not result in the violation of transaction semantics, a transactional cache consistency maintenance algorithm is required. Many such algorithms have been proposed in the literature and, as all provide the sam ...

10 Special system-oriented section: the best of SIGMOD '94: Sleepers and workaholics: caching strategies in mobile environments (extended version) 

Daniel Barbará, Tomasz Imieński

October 1995 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 4 Issue 4

Full text available:  pdf(1.73 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

In the mobile wireless computing environment of the future, a large number of users, equipped with low-powered palmtop machines, will query databases over wireless communication channels. Palmtop-based units will often be disconnected for prolonged periods of time, due to battery power saving measures; palmtops also will frequently relocate between different cells, and will connect to different data servers at different times. Caching of frequently accessed data items will be an important techni ...

Keywords: caching, data management, information services, wireless

11 Miscellaneous: Operating system performance and large servers 

Hyuck Yoo, Keng-Tai Ko

September 1994 **Proceedings of the 6th workshop on ACM SIGOPS European workshop: Matching operating systems to application needs**

Full text available:  pdf(463.16 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

Servers are an essential part of today's computing environments. High performance is one

of the critical requirements that the applications demand from servers. It is often found that the key performance bottleneck on servers is the operating systems. We have investigated the commonly encountered performance anomalies and found that they are due to the mismatches between operating systems and the distinct characteristics of server applications. The characteristics pose several scalability issues ...

12 An object server for an object-oriented database system

Andrea H. Skarra, Stanley B. Zdonik, Stephen P. Reiss

September 1986 **Proceedings on the 1986 international workshop on Object-oriented database systems**

Full text available:  [pdf\(853.89 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper summarizes the interface, implementation, and use of a server process that is used as a backend by an object-oriented database system. This server is responsible for managing objects on secondary storage, managing transactions, and implementing a simple form of trigger. We sketch the interface of this system and point out some of the more interesting implementation issues that were encountered in building it. Client processes communicate asynchronously with the server ...

13 Using metalevel techniques in a flexible toolkit for CSCW applications

Paul Dourish

June 1998 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 5 Issue 2

Full text available:  [pdf\(292.97 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Ideally, software toolkits for collaborative applications should provide generic, reusable components, applicable in a wide range of circumstances, which software developers can assemble to produce new applications. However, the nature of CSCW applications and the mechanics of group interaction present a problem. Group interactions are significantly constrained by the structure of the underlying infrastructure, below the level at which toolkits typically offer control. This article describe ...

Keywords: consistency control, consistency guarantees, data distribution, divergency, metalevel programming, open implementation, software architecture

14 Issues in the design of a flexible distributed architecture for supporting persistence and interoperability in collaborative virtual environments

Jason Leigh, Andrew E. Johnson, Thomas A. DeFanti

November 1997 **Proceedings of the 1997 ACM/IEEE conference on Supercomputing (CDROM)**

Full text available:  [pdf\(278.72 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

CAVERN, the CAVE Research Network, is an alliance of industrial and research institutions equipped with CAVE-based virtual reality hardware and high-performance computing resources, interconnected by high-speed networks, to support collaboration in design, education, engineering, and scientific visualization. CAVERNsoft is the collaborative software backbone for CAVERN. CAVERNsoft uses distributed data stores to manage the wide range of data volumes (from a few bytes to several terabytes) that ar ...

Keywords: collaborative, persistence, reality, scalable, virtual

15 Using Handheld Devices in Synchronous Collaborative Scenarios

Jörg Roth, Claus Unger

January 2001 **Personal and Ubiquitous Computing**, Volume 5 Issue 4

Full text available:  pdf(284.67 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

In this paper we present a platform specially designed for groupware applications running on handheld devices. Common groupware platforms request desktop computers as underlying hardware platforms. The fundamentally different nature of handheld devices has a great impact on the platform, e.g. resource limitations have to be considered, the network is slow and unstable. Often, personal data are stored on handheld devices, thus mechanisms have to ensure privacy. These considerations led to the Qui ...

16 Notification servers for synchronous groupware

John F. Patterson, Mark Day, Jakov Kucan

November 1996 **Proceedings of the 1996 ACM conference on Computer supported cooperative work**

Full text available:  pdf(850.36 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



Keywords: client/server architectures, design principles, groupware infrastructure, multi-user applications, notification, performance, protocol, state sharing, synchronous groupware

17 Fault tolerant distributed services

Allan D. Griefer, H. Raymond Strong

January 1988 **Proceedings of the seventh annual ACM Symposium on Principles of distributed computing**

Full text available:  pdf(1.12 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



18 A comparative analysis of groupware application protocols

Mark O. Pendergast

January 1998 **ACM SIGCOMM Computer Communication Review**, Volume 28 Issue 1

Full text available:  pdf(1.22 MB) Additional Information: [full citation](#), [abstract](#), [index terms](#)



Two of the most difficult problems faced by developers of synchronous groupware applications are the handling of multiple session connections and the maintenance of replicated data. Protocols and algorithms to solve these problems have evolved over the years as developers gained experience and network standards were developed and enriched. This paper analyzes the efficiency of three common application level protocols used for the development of groupware systems. These include central sequencing ...

19 A survey of asynchronous remote procedure calls

A. L. Ananda, B. H. Tay, E. K. Koh

April 1992 **ACM SIGOPS Operating Systems Review**, Volume 26 Issue 2

Full text available:  pdf(910.89 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)



Remote Procedure Call (RPC) is a popular paradigm for interprocess communication in distributed systems. It is simple, flexible and powerful. However, most of the RPC systems today are synchronous in nature, and hence fail to exploit fully the parallelism inherent in distributed applications. In view of this, various asynchronous RPC systems have been designed and implemented to achieve higher parallelism while retaining the familiarity and simplicity of synchronous RPC. Asynchronous RPC calls d ...

Keywords: asynchronous RPC, distributed systems, high-throughput, interprocess communication (IPC), intra-machine call, low-latency, parallelism, remote procedure call

(RPC), synchronous RPC, transport-independent

20 Performance evaluation of extended storage architectures for transaction processing 

Erhard Rahm

June 1992 **ACM SIGMOD Record , Proceedings of the 1992 ACM SIGMOD international conference on Management of data**, Volume 21 Issue 2

Full text available:  pdf(1.47 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The use of non-volatile semiconductor memory within an extended storage hierarchy promises significant performance improvements for transaction processing. Although page-addressable semiconductor memories like extended memory, solid-state disks and disk caches are commercially available since several years, no detailed investigation of their use for transaction processing has been performed so far. We present a comprehensive simulation study that compares the performance of these storage ty ...

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide

synchronous asynchronous database catalog server



THE ACM DIGITAL LIBRARY

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used

synchronous asynchronous database catalog server

Found 26,029 of 151,219

Sort results
by

[Save results to a Binder](#)

Try an [Advanced Search](#)

Display
results

[Search Tips](#)

Try this search in [The ACM Guide](#)

Open results in a new
window

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale

1 CARAT: a testbed for the performance evaluation of distributed database systems

Walt Kohler, Bao-Chyuan Jenq

November 1999 **Proceedings of 1986 ACM Fall joint computer conference**

Full text available: [pdf\(1.21 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



2 A flexible and recoverable client/server database event notification system

Eric N. Hanson, I.-Cheng Chen, Roxana Dastur, Kurt Engel, Vijay Ramaswamy, Wendy Tan, Chun Xu

February 1998 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 7 Issue 1

Full text available: [pdf\(105.38 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)



A software architecture is presented that allows client application programs to interact with a DBMS server in a flexible and powerful way, using either direct, volatile messages, or messages sent via recoverable queues. Normal requests from clients to the server and replies from the server to clients can be transmitted using direct or recoverable messages. In addition, an application event notification mechanism is provided, whereby client applications running anywhere on the network can register ...

3 Global change master directory: object-oriented active asynchronous transaction management in a federated environment using data agents

Zina Ben Miled, Srinivasan Sikkupparbathyam, Omran Bukhres, Kishan Nagendra, Eric Lynch, Marcelo Areal, Lola Olsen, Chris Gokey, David Kendig, Tom Northcutt, Rosy Cordova, Gene Major, Nanine Savage

March 2001 **Proceedings of the 2001 ACM symposium on Applied computing**

Full text available: [pdf\(185.55 KB\)](#) Additional Information: [full citation](#), [references](#), [index terms](#)



Keywords: JDBC, Java, RMI, World Wide Web, XML, asynchronous, component, distributed, distributed object management, global transaction management, interface, interoperability, object-oriented

4 The process group approach to reliable distributed computing

Kenneth P. Birman

December 1993 **Communications of the ACM**, Volume 36 Issue 12

Full text available:  pdf(6.00 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



Keywords: fault-tolerant process groups, message ordering, multicast communication

5 Understanding fault-tolerant distributed systems

Flavin Cristian

February 1991 **Communications of the ACM**, Volume 34 Issue 2

Full text available:  pdf(6.17 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#), [review](#)



6 Fast detection of communication patterns in distributed executions

Thomas Kunz, Michiel F. H. Seuren

November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research**

Full text available:  pdf(4.21 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

7 Distributed transactions in practice

Prabhu Ram, Lyman Do, Pamela Drew

September 1999 **ACM SIGMOD Record**, Volume 28 Issue 3

Full text available:  pdf(873.01 KB)

Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)



The concept of transactions and its application has found wide and often indiscriminate usage. In large enterprises, the model for distributed database applications has moved away from the client-server model to a multi-tier model with large database application software forming the middle tier. The software philosophy of "buy and not build" in large enterprises has had a major influence by extending functional requirements such as transactions and data consistency throughout th ...

8 On randomization in sequential and distributed algorithms

Rajiv Gupta, Scott A. Smolka, Shaji Bhaskar

March 1994 **ACM Computing Surveys (CSUR)**, Volume 26 Issue 1

Full text available:  pdf(8.01 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)



Probabilistic, or randomized, algorithms are fast becoming as commonplace as conventional deterministic algorithms. This survey presents five techniques that have been widely used in the design of randomized algorithms. These techniques are illustrated using 12 randomized algorithms—both sequential and distributed—that span a wide range of applications, including: primality testing (a classical problem in number theory), interactive probabilistic proofs ...

Keywords: Byzantine agreement, CSP, analysis of algorithms, computational complexity, dining philosophers problem, distributed algorithms, graph isomorphism, hashing,

interactive probabilistic proof systems, leader election, message routing, nearest-neighbors problem, perfect hashing, primality testing, probabilistic techniques, randomized or probabilistic algorithms, randomized quicksort, sequential algorithms, transitive tournaments, universal hashing

9 NSF workshop on industrial/academic cooperation in database systems

Mike Carey, Len Seligman

March 1999 **ACM SIGMOD Record**, Volume 28 Issue 1

Full text available:  pdf(1.96 MB)

Additional Information: [full citation](#), [index terms](#)



10 IS '97: model curriculum and guidelines for undergraduate degree programs in information systems

Gordon B. Davis, John T. Gorgone, J. Daniel Couger, David L. Feinstein, Herbert E. Longenecker

December 1996 **ACM SIGMIS Database , Guidelines for undergraduate degree programs on Model curriculum and guidelines for undergraduate degree programs in information systems**, Volume 28 Issue 1

Full text available:  pdf(7.24 MB)

Additional Information: [full citation](#), [citations](#)



11 Web technologies and applications (WTA): Adaptive data dissemination and caching for edge service architectures built with the J2EE

Erich Liebmann, Schahram Dustdar

March 2004 **Proceedings of the 2004 ACM symposium on Applied computing**

Full text available:  pdf(326.59 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



The deployment of distributed enterprise applications and e-business solutions, that leverage edge service architectures across wide area networks, require flexible and adaptable models for data dissemination and caching. In this paper we present the design of an architecture that streamlines the integration of proactive data dissemination and caching into e-commerce solutions built with the Java 2 Enterprise Edition. The utilization of an adaptive push and pull approach combined with the flexib ...

Keywords: J2EE, JMS, adaptive, caching, data dissemination, data services layer, distributed enterprise applications, edge services, pull, push

12 An agent architecture for personalized Web stores

L. Ardissono, C. Barbero, A. Goy, G. Petrone

April 1999 **Proceedings of the third annual conference on Autonomous Agents**

Full text available:  pdf(1.02 MB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)



13 Systems and prototypes: Java support for data-intensive systems: experiences building the telegraph dataflow system

Mehul A. Shah, Michael J. Franklin, Samuel Madden, Joseph M. Hellerstein

December 2001 **ACM SIGMOD Record**, Volume 30 Issue 4

Full text available:  pdf(1.38 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)



Database system designers have traditionally had trouble with the default services and

interfaces provided by operating systems. In recent years, developers and enthusiasts have increasingly promoted Java as a serious platform for building data-intensive servers. Java provides a number of very helpful language features, as well as a full run-time environment reminiscent of a traditional operating system. This combination of features and community support raises the question of whether Java is be ...

14 I/O reference behavior of production database workloads and the TPC benchmarks— an analysis at the logical level

Windsor W. Hsu, Alan Jay Smith, Honesty C. Young

March 2001 **ACM Transactions on Database Systems (TODS)**, Volume 26 Issue 1

Full text available:  pdf(5.42 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

As improvements in processor performance continue to far outpace improvements in storage performance, I/O is increasingly the bottleneck in computer systems, especially in large database systems that manage huge amounts of data. The key to achieving good I/O performance is to thoroughly understand its characteristics. In this article we present a comprehensive analysis of the logical I/O reference behavior of the peak production database workloads from ten of the world's largest corporatio ...

Keywords: I/O, TPC benchmarks, caching, locality, prefetching, production database workloads, reference behavior, sequentiality, workload characterization

15 Java resources for computer science instruction

Joseph Bergin, Thomas L. Naps, Constance G. Bland, Stephen J. Hartley, Mark A. Holliday, Pamela B. Lawhead, John Lewis, Myles F. McNally, Christopher H. Nevison, Cheng Ng, George J. Pothering, Tommi Teräsvirta

December 1998 **Working Group reports of the 3rd annual SIGCSE/SIGCUE ITiCSE conference on Integrating technology into computer science education**

Full text available:  pdf(107.98 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

16 Design and evaluation of a conit-based continuous consistency model for replicated services

Haifeng Yu, Amin Vahdat

August 2002 **ACM Transactions on Computer Systems (TOCS)**, Volume 20 Issue 3

Full text available:  pdf(406.85 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The tradeoffs between consistency, performance, and availability are well understood. Traditionally, however, designers of replicated systems have been forced to choose from either strong consistency guarantees or none at all. This paper explores the semantic space between traditional strong and optimistic consistency models for replicated services. We argue that an important class of applications can tolerate relaxed consistency, but benefit from bounding the maximum rate of inconsistent access ...

Keywords: Conit, consistency model, continuous consistency, network services, relaxed consistency, replication

17 Java resources for computer science instruction

Joseph Bergin, Thomas L. Naps, Constance G. Bland, Stephen J. Hartley, Mark A. Holliday, Pamela B. Lawhead, John Lewis, Myles F. McNally, Christopher H. Nevison, Cheng Ng, George J. Pothering, Tommi Teräsvirta

December 1998 **ACM SIGCSE Bulletin**, Volume 30 Issue 4

Full text available:  pdf(2.29 MB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

The goal of this working group was to collect, evaluate, and foster the development of resources to serve as components of both new and revised traditional courses that emphasize object-oriented software development using Java. These courses could, for example, integrate Internet-based distributed programming, concurrency, database programming, graphics and visualization, human interface design and object-oriented development. They could therefore also be suitable as capstone courses in computer ...

18 Java resources for computer science instruction

Joseph Bergin, Thomas L. Naps, Constance G. Bland, Stephen J. Hartley, Mark A. Holliday, Pamela B. Lawhead, John Lewis, Myles F. McNally, Christopher H. Nevison, Cheng Ng, George J. Pothering, Tommi Teräsvirta

October 1998 **ACM SIGCUE Outlook**, Volume 26 Issue 4

Full text available:  pdf(2.23 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The goal of this working group was to collect, evaluate, and foster the development of resources to serve as components of both new and revised traditional courses that emphasize object-oriented software development using Java. These courses could, for example, integrate Internet-based distributed programming, concurrency, database programming, graphics and visualization, human interface design and object-oriented development. They could therefore also be suitable as capstone courses in computer ...

19 Client-server computing

Alok Sinha

July 1992 **Communications of the ACM**, Volume 35 Issue 7

Full text available:  pdf(7.53 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#), [review](#)

Keywords: client-server computing

20 Empirical performance evaluation of concurrency and coherency control protocols for database sharing systems

Erhard Rahm

June 1993 **ACM Transactions on Database Systems (TODS)**, Volume 18 Issue 2

Full text available:  pdf(3.37 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Database Sharing (DB-sharing) refers to a general approach for building a distributed high performance transaction system. The nodes of a DB-sharing system are locally coupled via a high-speed interconnect and share a common database at the disk level. This is also known as a "shared disk" approach. We compare database sharing with the database partitioning (shared nothing) approach and discuss the functional DBMS components that require new and coordinated solutions for DB-shar ...

Keywords: coherency control, concurrency control, database partitioning, database sharing, performance analysis, shared disk, shared nothing, trace-driven simulation

Useful downloads: [!\[\]\(0271f7a0ac0c29ba1f8ceccd44fa7f94_img.jpg\) Adobe Acrobat](#) [!\[\]\(06d8acf86bbe3200b6d1be321941e702_img.jpg\) QuickTime](#) [!\[\]\(50d77b89a80316053d21522a6eeee2c8_img.jpg\) Windows Media Player](#) [!\[\]\(f2fbc73f7f581bb2492e0b49d6cdd840_img.jpg\) Real Player](#)



Membership Publications/Services Standards Conferences Careers/Jobs

Welcome
United States Patent and Trademark Office

» See

Help FAQ Terms IEEE Peer Review

Quick Links

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced
- CrossRef

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

IEEE Selected Items

- Access the IEEE Enterprise File Cabinet



Your search matched **2610** of **1140634** documents.
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or enterin new one in the text box.

 Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard**1 Asynchronous wrapper for heterogeneous systems**

Bormann, D.S.; Cheung, P.Y.K.;
Computer Design: VLSI in Computers and Processors, 1997. ICCD '97.
Proceedings., 1997 IEEE International Conference on , 12-15 Oct. 1997
Pages:307 - 314

[\[Abstract\]](#) [\[PDF Full-Text \(960 KB\)\]](#) **IEEE CNF****2 Asynchronous interconnect for synchronous SoC design**

Lines, A.;
Micro, IEEE , Volume: 24 , Issue: 1 , Jan.-Feb. 2004
Pages:32 - 41

[\[Abstract\]](#) [\[PDF Full-Text \(420 KB\)\]](#) **IEEE JNL****3 Performance analysis of mixed asynchronous synchronous systems**

Teich, J.; Sriram, S.; Thiele, L.; Martin, M.;
VLSI Signal Processing, VII, 1994., [Workshop on] , 26-28 Oct. 1994
Pages:103 - 112

[\[Abstract\]](#) [\[PDF Full-Text \(464 KB\)\]](#) **IEEE CNF****4 Scan test strategy for asynchronous-synchronous interfaces [SoC testing]**

Petre, O.; Kerkhoff, H.G.;
European Test Workshop, 2003. Proceedings. The Eighth IEEE , 25-28 May 20
Pages:43 - 48

[\[Abstract\]](#) [\[PDF Full-Text \(266 KB\)\]](#) **IEEE CNF**

5 Nexus: an asynchronous crossbar interconnect for synchronous system-on-chip designs

Lines, A.;

High Performance Interconnects, 2003. Proceedings. 11th Symposium on , 20 Aug. 2003

Pages:2 - 9

[\[Abstract\]](#) [\[PDF Full-Text \(4000 KB\)\]](#) [IEEE CNF](#)

6 Reactive modules

Alur, R.; Henzinger, T.A.;

Logic in Computer Science, 1996. LICS '96. Proceedings., Eleventh Annual IEE Symposium on , 27-30 July 1996

Pages:207 - 218

[\[Abstract\]](#) [\[PDF Full-Text \(1052 KB\)\]](#) [IEEE CNF](#)

7 Unifying synchronous/asynchronous state machine synthesis

Yun, K.Y.; Dill, D.L.;

Computer-Aided Design, 1993. ICCAD-93. Digest of Technical Papers., 1993 IEEE/ACM International Conference on , 7-11 Nov. 1993

Pages:255 - 260

[\[Abstract\]](#) [\[PDF Full-Text \(720 KB\)\]](#) [IEEE CNF](#)

8 Effective interference and effective bandwidth of linear multiuser receivers in asynchronous CDMA systems

Kiran; Tse, D.N.C.;

Information Theory, IEEE Transactions on , Volume: 46 , Issue: 4 , July 2000

Pages:1426 - 1447

[\[Abstract\]](#) [\[PDF Full-Text \(480 KB\)\]](#) [IEEE JNL](#)

9 Mixed synchronous/asynchronous state memory for low power FSM design

Cao, C.; Oelmann, B.;

Digital System Design, 2004. DSD 2004. Euromicro Symposium on , 31 Aug.-3 Sept. 2004

Pages:363 - 370

[\[Abstract\]](#) [\[PDF Full-Text \(387 KB\)\]](#) [IEEE CNF](#)

10 Power comparison of throughput optimized IC busses

Malley, E.; Salinas, A.; Ismail, K.; Pileggi, L.;

VLSI, 2003. Proceedings. IEEE Computer Society Annual Symposium on , 20-2 Feb. 2003

Pages:35 - 44

[\[Abstract\]](#) [\[PDF Full-Text \(625 KB\)\]](#) [IEEE CNF](#)

11 Reluctance synchronous motor asynchronous operation

Ferraz, C.A.M.D.; de Souza, C.R.;

Electrical and Computer Engineering, 2002. IEEE CCECE 2002. Canadian

Conference on , Volume: 1 , 12-15 May 2002
Pages:195 - 200 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(511 KB\)\]](#) [IEEE CNF](#)

12 An analysis of parallel synchronous and conservative asynchronous logic simulation schemes

Baker, W.I.; Mahmood, A.;
Parallel and Distributed Processing, 1994. Proceedings. Sixth IEEE Symposium on , 26-29 Oct. 1994
Pages:92 - 99

[\[Abstract\]](#) [\[PDF Full-Text \(648 KB\)\]](#) [IEEE CNF](#)

13 Designing asynchronous standby circuits for a low-power pager

Kessels, J.; Marston, P.;
Proceedings of the IEEE , Volume: 87 , Issue: 2 , Feb. 1999
Pages:257 - 267

[\[Abstract\]](#) [\[PDF Full-Text \(284 KB\)\]](#) [IEEE JNL](#)

14 Design of synchronisers: a review

Morin, L.; Li, H.F.;
Computers and Digital Techniques, IEE Proceedings E [see also Computers and Digital Techniques, IEE Proceedings-] , Volume: 136 , Issue: 6 , Nov. 1989
Pages:557 - 564

[\[Abstract\]](#) [\[PDF Full-Text \(700 KB\)\]](#) [IEE JNL](#)

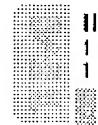
15 An extended comparison of slotted and unslotted deflection routing

Chich, T.; Fraigniaud, P.;
Computer Communications and Networks, 1997. Proceedings., Sixth International Conference on , 22-25 Sept. 1997
Pages:92 - 97

[\[Abstract\]](#) [\[PDF Full-Text \(852 KB\)\]](#) [IEEE CNF](#)

[1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [11](#) [12](#) [13](#) [14](#) [15](#) [16](#) [17](#) [18](#) [19](#) [20](#) [21](#) [22](#) [23](#)
[25](#) [26](#) [27](#) [28](#) [29](#) [30](#) [31](#) [32](#) [33](#) [34](#) [Next](#)


[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

 Welcome
United States Patent and Trademark Office


» Sea

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
Quick Links
Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced
- CrossRef

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

IEEE Enterprise

- Access the IEEE Enterprise File Cabinet

Print Format

Your search matched **37** of **1140634** documents.

A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or enterin new one in the text box.

 Check to search within this result set

Results Key:
JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

1 An asynchronous GALS interface with applications
Smith, S.F.;
Microelectronics and Electron Devices, 2004 IEEE Workshop on , 2004

Pages:41 - 44
[\[Abstract\]](#) [\[PDF Full-Text \(1382 KB\)\]](#) IEEE CNF

2 Performance evaluation of a hierarchical replication protocol: synchronous versus asynchronous
Adly, N.; Bacon, J.; Nagi, M.;
Services in Distributed and Networked Environments, 1995., Second Internatio Workshop on , 5-6 June 1995

Pages:102 - 109
[\[Abstract\]](#) [\[PDF Full-Text \(656 KB\)\]](#) IEEE CNF

3 Highly-available services using the primary-backup approach
Budhiraja, N.; Marzullo, K.;
Management of Replicated Data, 1992., Second Workshop on the , 12-13 Nov 1992

Pages:47 - 50
[\[Abstract\]](#) [\[PDF Full-Text \(304 KB\)\]](#) IEEE CNF

4 A broadband multimedia collaborative system for advanced teleradio and medical imaging diagnosis
Gomez, E.J.; del Pozo, F.; Ortiz, E.J.; Malpica, N.; Rahms, H.;
Information Technology in Biomedicine, IEEE Transactions on , Volume: 2 , Iss 3 , Sept. 1998

Pages:146 - 155

[\[Abstract\]](#) [\[PDF Full-Text \(744 KB\)\]](#) [IEEE JNL](#)

5 Flexible Collaborative Support: an architecture and application

Jones, P.M.; Lucenti, M.J., Jr.;

Systems, Man, and Cybernetics, 2000 IEEE International Conference on , Volu
2 , 8-11 Oct. 2000

Pages:1057 - 1062 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(476 KB\)\]](#) [IEEE CNF](#)

**6 Collaborative learning and technological environment for evoking
interactivity-building of knowledge**

Kayama, M.; Okamoto, T.;

Advanced Learning Technologies, 2003. Proceedings. The 3rd IEEE Internation
Conference on , 9-11 July 2003

Pages:320 - 321

[\[Abstract\]](#) [\[PDF Full-Text \(249 KB\)\]](#) [IEEE CNF](#)

**7 The knowledge management for collaborative learning support in th
Internet learning space**

Kayama, M.; Okamoto, T.;

Advanced Learning Technologies, 2001. Proceedings. IEEE International
Conference on , 6-8 Aug. 2001

Pages:273 - 276

[\[Abstract\]](#) [\[PDF Full-Text \(368 KB\)\]](#) [IEEE CNF](#)

**8 Collaborative learning support knowledge management for
asynchronous learning networks**

Okamoto, T.; Kayama, M.; Cristea, A.;

Advanced Learning Technologies, 2001. Proceedings. IEEE International
Conference on , 6-8 Aug. 2001

Pages:490 - 491

[\[Abstract\]](#) [\[PDF Full-Text \(180 KB\)\]](#) [IEEE CNF](#)

9 Building scenarios in the next generation of simulations

Stone, G.F., III; McGinnis, M.L.;

Systems, Man, and Cybernetics, 1998. 1998 IEEE International Conference
on , Volume: 4 , 11-14 Oct. 1998

Pages:3652 - 3657 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(400 KB\)\]](#) [IEEE CNF](#)

**10 A mobile agent for asynchronous administration of multiple DBMS
servers**

Takahashi, H.; Kavalan, V.;

Systems Management, 1998. Proceedings of the IEEE Third International Work
on , 22-24 April 1998

Pages:32 - 33

[\[Abstract\]](#) [\[PDF Full-Text \(12 KB\)\]](#) [IEEE CNF](#)

11 Synchronization mechanisms for distributed multimedia presentation systems

Adjeroh, D.A.; Lee, M.C.;

Multi-Media Database Management Systems, 1995. Proceedings., Internationa Workshop on , 28-30 Aug. 1995

Pages:30 - 37

[\[Abstract\]](#) [\[PDF Full-Text \(828 KB\)\]](#) [IEEE CNF](#)

12 Concurrent message passing in communicating sequential processes

Ahuja, M.; Sinha, A.B.;

Databases, Parallel Architectures and Their Applications,. PARBASE-90, International Conference on , 7-9 March 1990

Pages:76 - 84

[\[Abstract\]](#) [\[PDF Full-Text \(420 KB\)\]](#) [IEEE CNF](#)

13 Digital data-networks in a broadcast environment

Hulme, P.G.;

Broadcasting Convention, 1997. IBS 97., International (Conf. Publ. 447) , 12- Sept. 1997

Pages:LP78 - LP83

[\[Abstract\]](#) [\[PDF Full-Text \(488 KB\)\]](#) [IEE CNF](#)

14 Visualization in teleimmersive environments

Leigh, J.; Johnson, A.E.; Brown, M.; Sandin, D.J.; DeFanti, T.A.;

Computer , Volume: 32 , Issue: 12 , Dec. 1999

Pages:66 - 73

[\[Abstract\]](#) [\[PDF Full-Text \(876 KB\)\]](#) [IEEE JNL](#)

15 An algorithm for determining the feasibility of SONET/ATM rings in broadband networks

Lee, J.J.; Kwi-yung Jung;

Computer Communications and Networks, 1995. Proceedings., Fourth Internat Conference on , 20-23 Sept. 1995

Pages:356 - 360

[\[Abstract\]](#) [\[PDF Full-Text \(392 KB\)\]](#) [IEEE CNF](#)

[1](#) [2](#) [3](#) [Next](#)



Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced
- CrossRef

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

IEEE Enterprise

- Access the IEEE Enterprise File Cabinet

Print Format

Your search matched **37** of **1140634** documents.
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or enterin new one in the text box.

 Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

1 An asynchronous GALS interface with applications*Smith, S.F.;*

Microelectronics and Electron Devices, 2004 IEEE Workshop on , 2004

Pages:41 - 44

[\[Abstract\]](#) [\[PDF Full-Text \(1382 KB\)\]](#) IEEE CNF**2 Performance evaluation of a hierarchical replication protocol: synchronous versus asynchronous***Adly, N.; Bacon, J.; Nagi, M.;*

Services in Distributed and Networked Environments, 1995., Second Internatio Workshop on , 5-6 June 1995

Pages:102 - 109

[\[Abstract\]](#) [\[PDF Full-Text \(656 KB\)\]](#) IEEE CNF**3 Highly-available services using the primary-backup approach***Budhiraja, N.; Marzullo, K.;*

Management of Replicated Data, 1992., Second Workshop on the , 12-13 Nov 1992

Pages:47 - 50

[\[Abstract\]](#) [\[PDF Full-Text \(304 KB\)\]](#) IEEE CNF**4 A broadband multimedia collaborative system for advanced teleradio and medical imaging diagnosis***Gomez, E.J.; del Pozo, F.; Ortiz, E.J.; Malpica, N.; Rahms, H.;*

Information Technology in Biomedicine, IEEE Transactions on , Volume: 2 , Iss 3 , Sept. 1998

Pages:146 - 155

[Abstract] [PDF Full-Text (744 KB)] IEEE JNL

5 Flexible Collaborative Support: an architecture and application

Jones, P.M.; Lucenti, M.J., Jr.;

Systems, Man, and Cybernetics, 2000 IEEE International Conference on , Volu
2 , 8-11 Oct. 2000

Pages:1057 - 1062 vol.2

[Abstract] [PDF Full-Text (476 KB)] IEEE CNF

**6 Collaborative learning and technological environment for evoking
interactivity-building of knowledge**

Kayama, M.; Okamoto, T.;

Advanced Learning Technologies, 2003. Proceedings. The 3rd IEEE Internation
Conference on , 9-11 July 2003

Pages:320 - 321

[Abstract] [PDF Full-Text (249 KB)] IEEE CNF

**7 The knowledge management for collaborative learning support in th
Internet learning space**

Kayama, M.; Okamoto, T.;

Advanced Learning Technologies, 2001. Proceedings. IEEE International
Conference on , 6-8 Aug. 2001

Pages:273 - 276

[Abstract] [PDF Full-Text (368 KB)] IEEE CNF

**8 Collaborative learning support knowledge management for
asynchronous learning networks**

Okamoto, T.; Kayama, M.; Cristea, A.;

Advanced Learning Technologies, 2001. Proceedings. IEEE International
Conference on , 6-8 Aug. 2001

Pages:490 - 491

[Abstract] [PDF Full-Text (180 KB)] IEEE CNF

9 Building scenarios in the next generation of simulations

Stone, G.F., III; McGinnis, M.L.;

Systems, Man, and Cybernetics, 1998. 1998 IEEE International Conference
on , Volume: 4 , 11-14 Oct. 1998

Pages:3652 - 3657 vol.4

[Abstract] [PDF Full-Text (400 KB)] IEEE CNF

**10 A mobile agent for asynchronous administration of multiple DBMS
servers**

Takahashi, H.; Kavalan, V.;

Systems Management, 1998. Proceedings of the IEEE Third International Work
on , 22-24 April 1998

Pages:32 - 33

[\[Abstract\]](#) [\[PDF Full-Text \(12 KB\)\]](#) [IEEE CNF](#)

11 Synchronization mechanisms for distributed multimedia presentation systems

Adjeroh, D.A.; Lee, M.C.;

Multi-Media Database Management Systems, 1995. Proceedings., Internationa Workshop on , 28-30 Aug. 1995

Pages:30 - 37

[\[Abstract\]](#) [\[PDF Full-Text \(828 KB\)\]](#) [IEEE CNF](#)

12 Concurrent message passing in communicating sequential processes

Ahuja, M.; Sinha, A.B.;

Databases, Parallel Architectures and Their Applications,. PARBASE-90, International Conference on , 7-9 March 1990

Pages:76 - 84

[\[Abstract\]](#) [\[PDF Full-Text \(420 KB\)\]](#) [IEEE CNF](#)

13 Digital data-networks in a broadcast environment

Hulme, P.G.;

Broadcasting Convention, 1997. IBS 97., International (Conf. Publ. 447) , 12- Sept. 1997

Pages:LP78 - LP83

[\[Abstract\]](#) [\[PDF Full-Text \(488 KB\)\]](#) [IEE CNF](#)

14 Visualization in teleimmersive environments

Leigh, J.; Johnson, A.E.; Brown, M.; Sandin, D.J.; DeFanti, T.A.;

Computer , Volume: 32 , Issue: 12 , Dec. 1999

Pages:66 - 73

[\[Abstract\]](#) [\[PDF Full-Text \(876 KB\)\]](#) [IEEE JNL](#)

15 An algorithm for determining the feasibility of SONET/ATM rings in broadband networks

Lee, J.J.; Kwi-yung Jung;

Computer Communications and Networks, 1995. Proceedings., Fourth Internat Conference on , 20-23 Sept. 1995

Pages:356 - 360

[\[Abstract\]](#) [\[PDF Full-Text \(392 KB\)\]](#) [IEEE CNF](#)

[1](#) [2](#) [3](#) [Next](#)
